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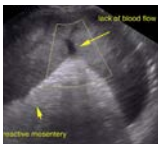
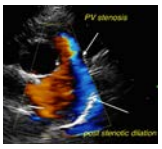
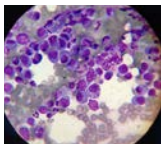
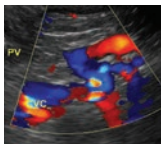

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1-800-838-4268 info@sonopath.com

PATIENT

Penelope Poo Jennings

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

8 Years

WEIGHT

11.5 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Dr. Tam Mengine

HOSPITAL NAME

Stoney Creek VH

REFERRING VET

Dr. Tam Mengine

INVOICE

33937

DATE

1/4/22

PRESENTING CLINICAL SIGNS

Several year history of vomiting and regurg. Prior U/S's with radiologist: 2/19 - mesenteric lymphadenopathy, with sampling for cytology and PARR - consistent with IBD - took short course of pred, and switched to hydrolyzed protein diet 3/20 - flare up of regurgitation, ultrasound with radiologist: " - Hyperechoic gastric pyloric wall. - Disproportionate lamina propria layer hyperechoic thickening with gas entrapment in the descending duodenum with spastic peristalsis. - Hypoechoic pancreas, sens to transducer pressure" Treated with omeprazole, carafate and cerenia, signs resolved. 10/21 - flare up of vomiting and regurg, did a pred taper + pepcid. Improved until 2 weeks ago when pet began regurgitating and having decreased appetite. Currently on pepcid and mirtazapine + hydrolyzed diet. CBC / Chem / T4 last week wnl, U/A pending Pet also had chronic rhinitis (presumably herpesviral) for which it takes lysine and occasionally antibiotics & famciclovir Bilateral nephroliths visible on rad today

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (3.95 cm) with small non-obstructive nephroliths. Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal/borderline large in size (4.23 cm) with moderate pyelectasia at 0.43 cm. A large shadowing, non-obstructive nephrolith at the level of the renal pelvis is noted, measuring 0.41 cm. There is evidence of proximal ureteral dilation with the ureter measuring approximately 0.24 cm, 2.0 cm distally from the right kidney, where there is a small, hyperechoic shadowing structure measuring 0.24 cm, which is most consistent with a ureterolith. More distal ureteral dilation is not visualized. Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of infarcts. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.38 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.36 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size (0.74 cm in width at the level of the hilus), echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

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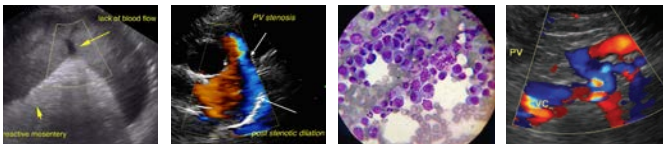

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Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.36cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Duodenum wall measured 0.24 cm, jejunum wall measured 0.27, 0.23 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness (0.17 cm). Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

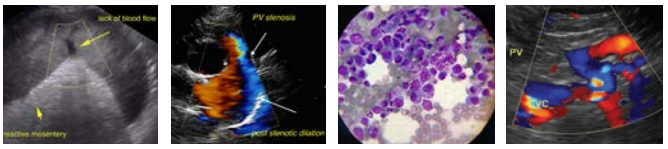
ULTRASONOGRAPHIC FINDINGS

- Pyelectasia of the right kidney with mild ureteral dilation and a suspected small ureterolith – Ureteral dilation is relatively mild/subtle, and could be consistent with a partial obstruction, early obstruction, or minimally obstructive ureterolith (older, chronic lesion).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There are no focal lesions visualized to explain the vomiting and regurgitation reported in the history. There is evidence of dilation of the right kidney with nephroliths and a possible right ureterolith. Sometimes cats will vomit due to pain from passing nephroliths, so it is unclear if this is a primary GI problem, or an issue with ureteroliths. The ureteral dilation is relatively mild and there is no surrounding inflammation, so this could also be somewhat of an incidental finding.

- Recommend urinalysis and culture to look for evidence of hemorrhage, infection, etc.
- Recommend mild fluid diuresis, pain medications, nausea medications, and treatment for possible esophagitis.
- Recommend recheck of current renal values and then rechecking again in about a week combined with recheck ultrasound or radiographs if the ureterolith can be visualized to see if renal pelvic dilation is more severe, stable, or if the ureterolith is passing. If this patient is not



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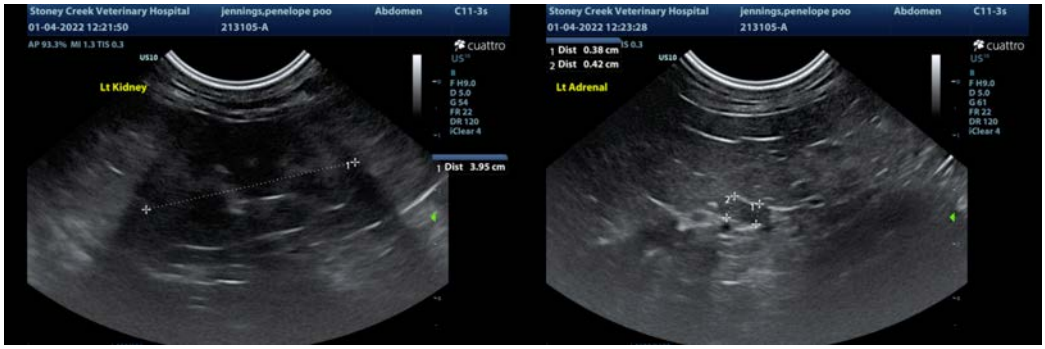
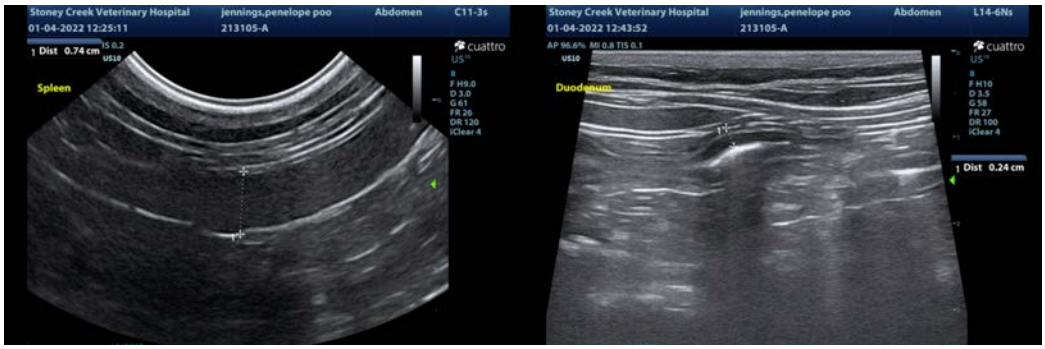
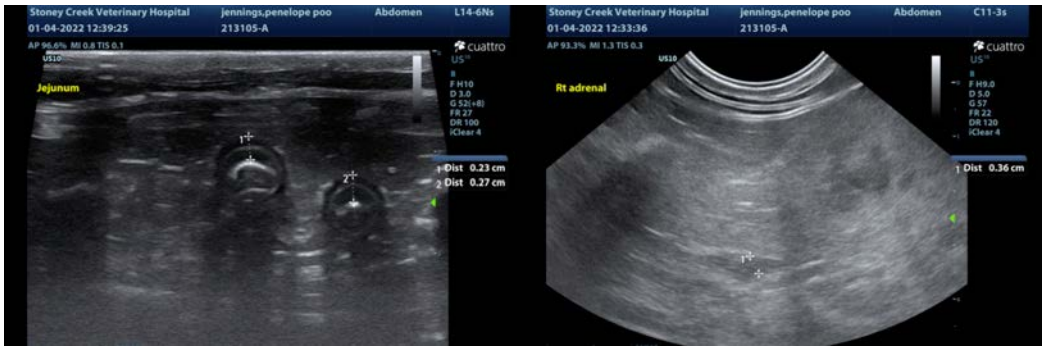
doing well, consider recheck sooner.

- If renal symptoms are progressing a contrast CT scan may be necessary to further evaluate for multiple nephroliths, strictures etc..
- Also consider that there could be concurrent GI disease. Consider GI panel to Texas A&M to further evaluate the pancreas and small intestine. Continue symptomatic treatment for dietary upset, a prescription diet, etc., as this could also be a flare up of IBD.
- Regurgitation is fairly unusual in cats. Make sure there are current 3-view thoracic radiographs. Historically I would recommend screening for Addison's disease, myasthenia gravis, and a contrast study (barium esophagram) +/- esophagoscopy in most regurgitating cats. However, if symptoms are episodic, these seem less likely.







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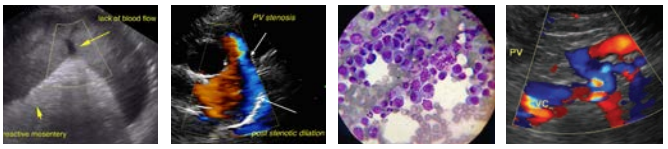

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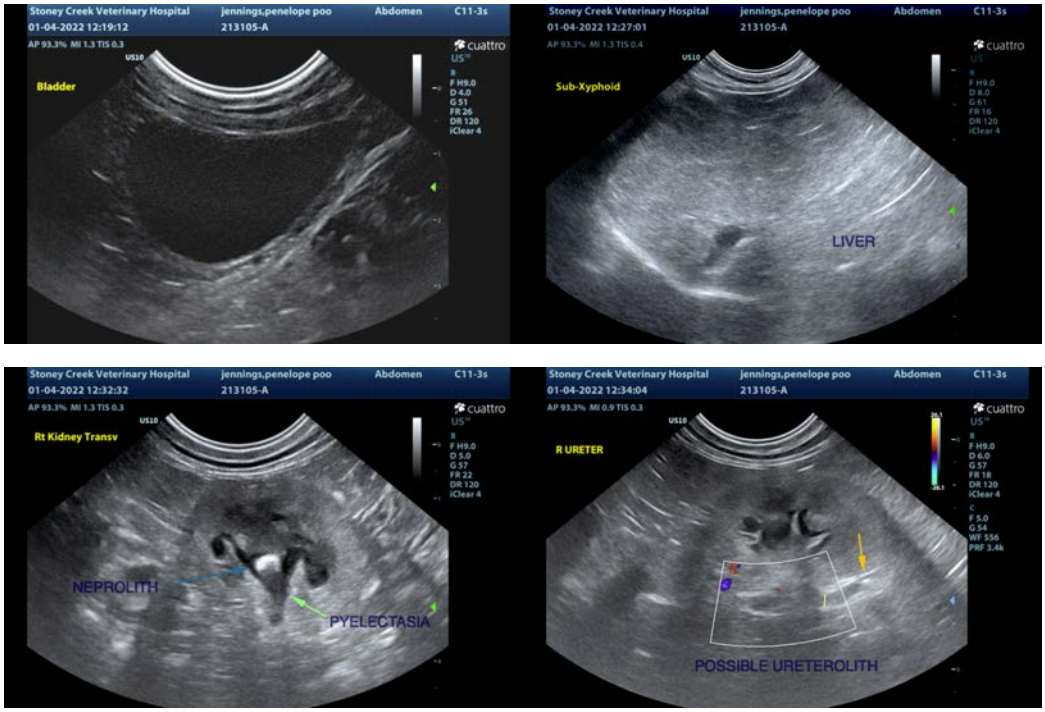

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com